



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2018-0637; Product Identifier 2018-NM-091-AD; Amendment 39-19496; AD 2018-23-10]**

**RIN 2120-AA64**

**Airworthiness Directives; Airbus SAS Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), Department of Transportation (DOT).

**ACTION:** Final rule.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for certain Airbus SAS Model A350-941 airplanes. This AD was prompted by leakage of shrouded pipe T-boxes in the potable water system. This AD requires replacement of the affected potable water T-boxes and clamps with new parts. We are issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** For service information identified in this final rule, contact Airbus SAS, Airworthiness Office – EAL, Rond-Point Emile Dewoitine No: 2, 31700 Blagnac Cedex,

France; telephone +33 5 61 93 36 96; fax +33 5 61 93 45 80; email continued-airworthiness.a350@airbus.com; Internet <http://www.airbus.com>. You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0637.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0637; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the regulatory evaluation, any comments received, and other information. The address for Docket Operations (phone: 800-647-5527) is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** Kathleen Arrigotti, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3218.

### **SUPPLEMENTARY INFORMATION:**

#### **Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain Airbus SAS Model A350-941 airplanes. The NPRM published in the Federal Register on August 2, 2018 (83 FR 37766). The NPRM

was prompted by leakage of shrouded pipe T-boxes in the potable water system. The NPRM proposed to require replacement of the affected potable water T-boxes and clamps with new parts.

We are issuing this AD to address the possible leakage of water into the avionics bay. This condition, if not corrected, could lead to the loss of systems/equipment located inside the avionics bay and possible loss of control of the airplane.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2018-0111R1, dated May 30, 2018 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for certain Airbus SAS Model A350-941 airplanes. The MCAI states:

During a pressure test on the A350 Final Assembly Line (FAL), leakage was observed on the potable water system shrouded pipes, due to a crack failure on the T-Boxes. Leakage of a primary pipe may cause water ingress into the avionics bay. Additionally, during another pressure proof test on the A350 FAL, loss of torque was detected on the clamps used to attach the shrouded pipes on the T-Boxes.

This condition, if not corrected, could lead to loss of systems/equipment located inside the avionics bay, possibly resulting in an unsafe condition.

Prompted by these findings, Airbus developed improved potable water T-Boxes and clamps, which are embodied in production through Airbus mod 111435 or mod 111440, and introduced in service through the SB [Service Bulletin A350-38-P004].

For the reasons described above, this [EASA] AD requires replacement of the affected potable water shrouded pipe T-Boxes and clamps with new parts.

This [EASA] AD was revised to exclude post-mod 111440 aeroplanes from the Applicability.

You may examine the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0637.

## **Comments**

We gave the public the opportunity to participate in developing this final rule. The following presents the comments received on the NPRM and the FAA's response to each comment.

### **Request to Reference Maintenance Procedure (MP) Task for Additional Information**

Delta Air Lines (DAL) requested that we reference Airbus MP Task A350-A-20-51-64-01001-25BA-A in the proposed AD as a guide for installing and torquing the hardware. DAL stated that the additional information provided in the MP task would ensure a more complete set of installation instructions.

We agree with the commenter, because the referenced MP task does provide proper torque values. We have added a reference to the specified MP task as a note to paragraph (g) of this AD.

### **Request to Remove Leak Test Requirement**

DAL requested that we remove the system leak test requirement from the proposed AD. DAL stated that Airbus gave them permission to forego the test because the potable water system requires no maintenance, and that the test is therefore unnecessary.

We disagree with removing the required test, because we have insufficient evidence to warrant removing a required test from this AD for all operators. DAL may request approval of an alternative method of compliance (AMOC), if it can provide

sufficient data to substantiate that skipping the test would provide an acceptable level of safety for DAL's fleet. We have not changed this AD in this regard.

### **Request to Provide Alternative Hardware Solution**

DAL requested that we modify the proposed AD by raising the required torque value or requiring a lockwire for the clamp screw. DAL asserted that the torque value given in the service information is very low for this type of clamp, and that if the screw loses its torque, the clamp could depart the shell and fall into the avionics bay, creating a possible hazard to safe navigation.

We disagree with DAL's request because we have confirmed with Airbus and EASA that the clamp torque specified in the referenced service information is correct. Concerned operators may request approval of an AMOC for a lockwire solution under the provisions of paragraph (h) of this AD. We have not changed this AD in this regard.

### **Conclusion**

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this final rule with the change described previously and minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for addressing the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

We also determined that these changes will not increase the economic burden on any operator or increase the scope of this final rule.

## **Related Service Information under 1 CFR part 51**

Airbus has issued Service Bulletin A350-38-P004, dated April 11, 2018. This service information describes procedures for replacing the affected potable water T-boxes and clamps with new parts. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

## **Costs of Compliance**

We estimate that this AD affects 7 airplanes of U.S. registry. We estimate the following costs to comply with this AD:

### **Estimated costs**

<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>	<b>Cost on U.S. operators</b>
Up to 16 work-hours X \$85 per hour = \$1,360	Up to \$2,050	Up to \$3,410	Up to \$23,870

According to the manufacturer, some or all of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all known costs in our cost estimate.

## **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress

charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to transport category airplanes and associated appliances to the Director of the System Oversight Division.

### **Regulatory Findings**

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

## **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**2018-23-10 Airbus SAS:** Amendment 39-19496; Docket No. FAA-2018-0637; Product Identifier 2018-NM-091-AD.

#### **(a) Effective Date**

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### **(b) Affected ADs**

None.

#### **(c) Applicability**

This AD applies to Airbus SAS Model A350-941 airplanes, certificated in any category, except those on which Airbus modification (mod) 111435 or mod 111440 has been embodied in production.



**(d) Subject**

Air Transport Association (ATA) of America Code 38, Water/waste.

**(e) Reason**

This AD was prompted by leakage of shrouded pipe T-boxes in the potable water system. We are issuing this AD to address the possible leakage of water into the avionics bay. This condition, if not corrected, could lead to the loss of systems/equipment located inside the avionics bay and possible loss of control of the airplane.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Required Actions**

Within 36 months after the effective date of this AD: Replace the affected potable water T-boxes and clamps with new parts in accordance with the Accomplishment Instructions of Airbus Service Bulletin A350-38-P004, dated April 11, 2018.

Note 1 to paragraph (g) of this AD: Airbus Maintenance Procedure (MP) Task A350-A-20-51-64-01001-25BA-A provides additional information for installing and torquing the hardware.

**(h) Other FAA AD Provisions**

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs)*: The Manager, International Section, Transport Standards Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International

Section, send it to the attention of the person identified in paragraph (i)(2) of this AD. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(2) *Contacting the Manufacturer:* For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Section, Transport Standards Branch, FAA; or the European Aviation Safety Agency (EASA); or Airbus SAS's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(3) *Required for Compliance (RC):* If any service information contains procedures or tests that are identified as RC, those procedures and tests must be done to comply with this AD; any procedures or tests that are not identified as RC are recommended. Those procedures and tests that are not identified as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the procedures and tests identified as RC can be done and the airplane can be put back in an airworthy condition. Any substitutions or changes to procedures or tests identified as RC require approval of an AMOC.

**(i) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA AD 2018-0111R1, dated May 30, 2018, for related information. This MCAI may be found in the AD docket on the Internet at <http://www.regulations.gov> by searching for

and locating Docket No. FAA-2018-0637.

(2) For more information about this AD, contact Kathleen Arrigotti, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3218.

(3) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (j)(3) and (j)(4) of this AD.

**(j) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) Airbus Service Bulletin A350-38-P004, dated April 11, 2018.

(ii) [Reserved]

(3) For service information identified in this AD, contact Airbus SAS, Airworthiness Office – EAL, Rond-Point Emile Dewoitine No: 2, 31700 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 45 80; email [continued-airworthiness.a350@airbus.com](mailto:continued-airworthiness.a350@airbus.com); Internet <http://www.airbus.com>.

(4) You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:  
<http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Des Moines, Washington, on November 5, 2018.

Chris Spangenberg,  
Acting Director,  
System Oversight Division,  
Aircraft Certification Service.

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